

Table 1

		Example 1 Polyamide	Example 2 Polyamide	Example 3 Polyamide	Example 4 Polyamide	Example 5 Polyamide	Example 6 Polyamide
Polymer	Relative viscosity to formic acid	60	60	60	60	60	60
	Addition amount of titanium oxide (ppm)	0	0	0	0	0	0
	Addition amount of copper (ppm)	65	65	65	65	65	65
	Fineness of yarn (dTex)	78	78	78	78	78	78
Yarn	Number of filament	35	35	35	35	35	35
	Tensile strength (cN/dTex)	7.1	6.3	5.4	7.1	6.7 X 7.1	7.1
	Elongation at break (%)	22	24	37	22	25 X 22	22
	Tensile work at break (cN·cm/dTex)	16.3	23.9	26.0	16.3	19.8 X 16.3	16.3
(Total Fineness of yarn) (dTex)	Birefringence ($\Delta n \times 10^3$)	56	54	53	56	54 X 56	56
	Fineness of Yarn (warp x weft) (dTex)	78/2 X 78/2	78/1 X 78/1				
	Weave density (end or picks/2.54 cm)	156 X 156	78 X 78				
	Weave Fineness of yarn (dTex end/2.54 cm)	95 X 93	95 X 93	95 X 93	90 X 98	94 X 94	142 X 142
Fabric	Thickness (mm)	0.198	0.198	0.198	0.197	0.197	0.158
	Basis of Weight (g/m ²)	125	125	125	125	125	94
	Tensile strength (N/2.54 cm)	1010 X 930	900 X 850	770 X 740	963 X 983	951 X 941	760 X 740
	Elongation at breaks (%)	35 X 27	45 X 34	54 X 43	35 X 27	40 X 27	37 X 26
Air bag	Load at 15% elongation (N/%/2.54 cm)	16 X 14	12 X 14	13 X 14	-	-	8 X 16
	Tensile work at break (N.%/2.54 cm)	20500 X 13500	20600 X 14500	17500 X 13600	17800 X 14900	20500 X 14000	12500 X 8000
	Retention of resistance to heat (%)	95	95	95	95	95	95
	Compactness	0.81	0.81	0.81	0.83	0.80	0.75
	Result of deployment test	Not broken					

Note: X denotes that values in warp and weft are shown.

Table 2

		Comparative Example 1	Comparative Example 2	Comparative Example 3	Comparative Example 4
Description	Polyamide	Polyamide	Polyamide	Polyamide	Polyamide
Relative viscosity to formic acid	60	60	45	80	80
Polymer					
Addition amount of titanium oxide (ppm)	0	0	0	20	20
Addition amount of copper (ppm)	0	10	70	70	70
Yarn					
Fineness of yarn (dTex)	78	78	56	233	233
Number of filament	35	35	34	35	35
Tensile strength (CN/dTex)	7.0	6.3	5.4	7.1	7.1
Elongation at break (%)	22	24	37	22	22
Tensile work at break (cN·cm/dTex)	16.3	16.4	26.8	17.3	17.3
Birefringence ($\Delta n \times 10^3$)	56	56	53	57	57
Fineness of yarn (warp x weft) (dTex)	78/2 × 78/2	78/2 × 78/2	56/1 × 56/1	233/1 × 233/1	233/1 × 233/1
(Total Fineness of yarn) (dTex)	156 × 156	156 × 156	56 × 56	233 × 233	233 × 233
Weave density (end or picks/2.54 cm)	95 × 93	95 × 93	192 × 190	78 × 75	78 × 75
Weave Fineness of Yarn (dTex end/2.54 cm)	14820 × 14508	14820 × 14508	10752 × 10640	18174 × 17475	18174 × 17475
Fabric					
Thickness (mm)	0.198	0.198	0.130	0.230	0.230
Basis of Weight (g/m ²)	125	125	92	152	152
Tensile strength (N/2.54 cm)	998 × 872	1000 × 871	564 × 559	1326 × 1275	1326 × 1275
Elongation at breaks (%)	16 × 15	16 × 14	7 × 17	20 × 30	20 × 30
Load at 15% elongation (N/%/2.54 cm)	35 × 26	36 × 26	25 × 25	32 × 30	32 × 30
Tensile work at break (N %/2.54 cm)	20000 × 12000	20500 × 12000	6000 × 5900	30000 × 26000	30000 × 26000
Retention of resistance to heat (%)	48	70	-	-	-
Air bag	Compactness	0.81	0.81	0.70	1.00
	Result of deployment test	Broken	Broken	Not broken	Not broken